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# SSR2 (1<sup>st</sup> CM) Solenoid Fault Linac Lattice Retuning – version 2

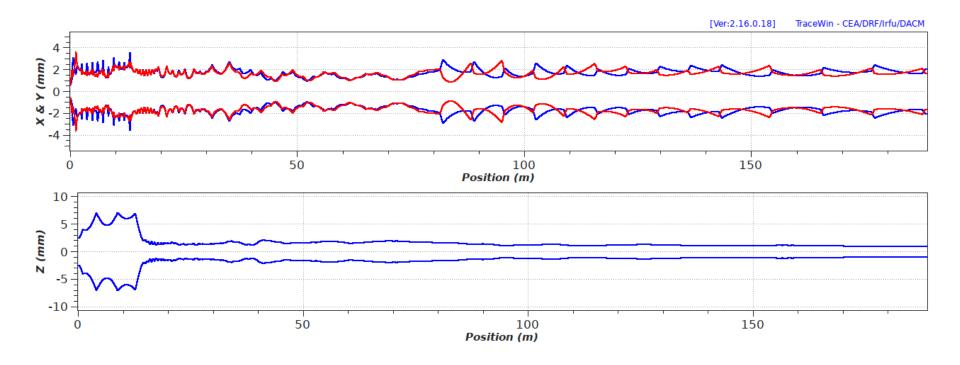
JF Ostiguy Accelerator Physics Meeting 07/11/2019

#### **Retuning Strategy**

- SSR2 period focusing element pattern is S-CC; loosing the solenoid has strong effect on transverse dynamics due to cavity transverse defocusing
- Adjust transverse focusing deep in the upstream SSR1 CM so as to trade reduced tranverse size at SSR2 CM exit for an increase in average size in SSR1. Adjust Field and Phase in cavities of the SSR2 module to match unperturbed lattice functions at the downstream end of SSR2 period 2.

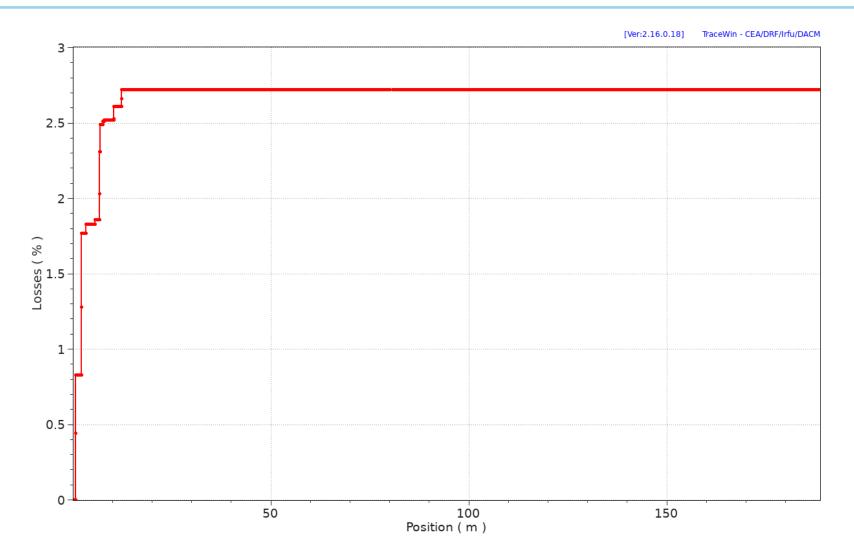


# Retuned Lattice Envelope Partran Mode



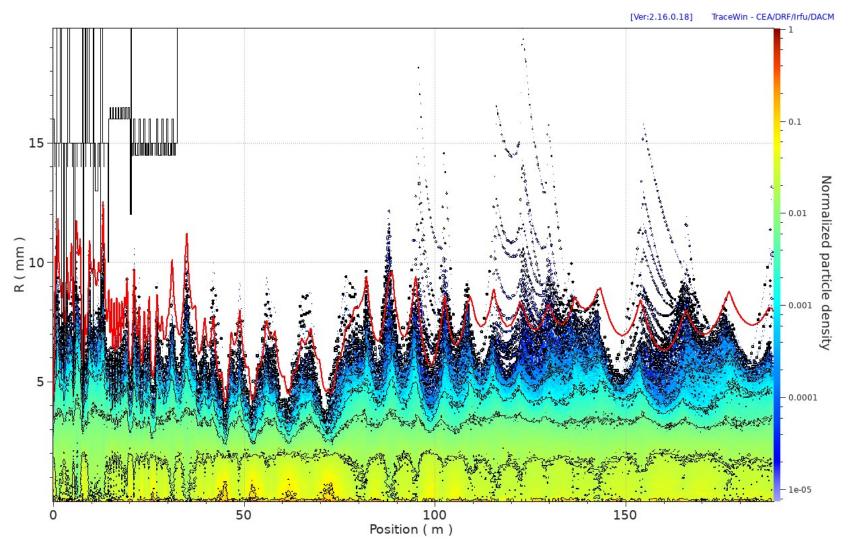


#### Losses



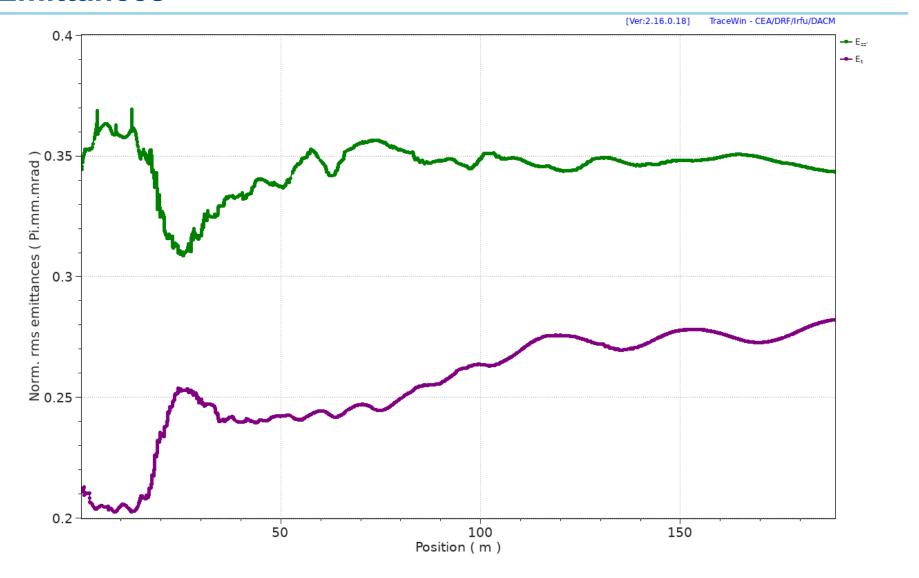


### **Density**





#### **Emittances**





## **Energy**

